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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,565	04/04/2006	Tomokazu Hayashi	77661-65	2114
23838 7590 06/11/2008 KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005				
EXAMINER PARSONS, THOMAS H				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
06/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/574,565

**Applicant(s)**

HAYASHI ET AL.

**Examiner**

THOMAS H. PARSONS

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 14-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 04/04/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:  
page 4, line 1, suggest deleting the first occurrence of “the”.  
page 9, line 20, suggest inserting “(Fig. 7)”, after “piled”.  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi et al. (6,833,210).

**Claim 14:** Kikuchi et al. disclose seal structure of a fuel cell, the fuel cell including an MEA (3), a separator (4A or 5A), a gas passage (4a or 5a) formed in separator, a gas manifold (17, 18) formed in the separator, a connecting gas passage formed in the separator and between the gas passage and the gas manifold, a coolant passage (4a or 5a) formed in the separator, a coolant manifold (19) formed in the separator, a connecting coolant passage formed in the separator and between the coolant passage and the coolant manifold, and a seal (6A, 7A, and 27)

for preventing gas and/or coolant from leaking and defining a continuous seal line, the seal structure of a fuel cell comprising an interrupted back-up (29) disposed at at least one of the connecting gas passage and the connecting coolant passage, the back-up located on one side of the separator and a portion of seal line located on the other side of the separator being disposed such that said back-up and the portion of the seal line are overlapped with each other in a fuel cell stacking direction, characterized in that the back-up is formed in the separator (i.e. integrated) and includes a rib having a convex and concave structure (Fig. 11, and col. 14: 3-6). See entire document, in particular, col. 6: 12-col. 11: 24.

**Claim 15:** Kikuchi et al. in Figures 2-4 disclose that the back-up is disposed at connecting gas passage between the gas passage and the gas manifold. See also Figures 12-14.

**Claim 16:** Kikuchi et al. in Figure 4 disclose that the back-up is disposed at said connecting coolant passage between said coolant passage and said coolant manifold. See also Figures 12-14.

**Claim 17:** Kikuchi et al. in Figures 2-4 disclose that the, wherein though said gas manifold and the coolant manifold differs in width to each other, the interrupted back-up and a portion of the seal line positioned in an extension of the interrupted back-up are disposed on a same straight line. See also Figures 12-14.

**Claim 18:** Kikuchi et al. in Figures 2-4 disclose that the back-up is formed in the separator (integrated) and includes a plurality of protrusions spaced from each other. See also Figures 12-14.

**Claim 19:** Kikuchi et al. in Figures 2-4 disclose that the back-up is formed in the separator (i.e. integrated) and includes a rib having a plurality of tunnels formed in the rib and spaced from each other (e.g. Figure 11).

**Claim 20:** Kikuchi et al. in Figures 2-4 disclose that an entire portion of the back-up located between adjacent separators is formed (i.e. integrated) in either one separator of the adjacent separators. See also Figures 12-14.

**Claim 21:** Kikuchi et al. in Figures 2-4 disclose that a portion of the back-up located between adjacent separators is formed in one separator of the adjacent separators (i.e. integrated) , and a remaining portion of the back-up located between adjacent separators is formed in the other separator of the adjacent separators. See also Figures 12-14.

### **Examiner Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS H. PARSONS whose telephone number is (571)272-1290. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICK RYAN/  
Supervisory Patent Examiner, Art Unit 1795

Thomas H Parsons  
Examiner  
Art Unit 1795

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